

CLAIMS ONLY

SERIAL NO.

09944603

FILING DATE

09-04-01

APPLICANT(S)

CLAIMS

	AS FILED		AFTER 1st AMENDMENT		AFTER 2nd AMENDMENT			★		★		★	
	IND.	DEP.	IND.	DEP.	IND.	DEP.		IND.	DEP.	IND.	DEP.	IND.	DEP.
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TOTAL DEP.	19	←		←		←	TOTAL DEP.	←		←		←	
TOTAL CLAIMS	33						TOTAL CLAIMS						

* MAY BE USED FOR ADDITIONAL CLAIMS OR ADMENDMENTS

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	09/944,603
				Filing Date	September 4, 2001
				First Named Inventor	Handelman
				Group Art Unit	
				Examiner Name	
Sheet	1	of	7	Attorney Docket Number	9999-1

U.S. PATENT DOCUMENTS						
Examiners Initials	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, columns, lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	AA	4,626,075		Chemla	12-2-1986	
	AB	5,170,273		Nishio	12-8-1992	
	AC	5,191,457		Yamazaki	3-2-1993	
	AD	5,194,977		Nishio	3-16-1993	
	AE	5,400,322		Hunt et al	3-21-1995	
	AF	5,452,115		Tomioka	9-19-1995	
	AG	5,457,687		Newman	10-05-1995	
	AH	5,479,447		Chow et al	12-26-1995	
	AI	5,557,439		Alexander et al	9-17-1996	
	AJ	5,680,490		Cohen et al	10-21-1997	
	AK	5,712,932		Alexander et al	1-27-1998	
	AL	5,724,167		Sabella	3-3-1998	
	AM	5,739,935		Sabella	4-14-1998	
	AN	5,774,244		Tandon et al	06-30-1998	
	AO	5,867,289		Gertsel	2-2-1999	
	AP	6,108,112		Touma	8-22-2000	
	AQ	6,233,082		Johnson	05-15-2001	

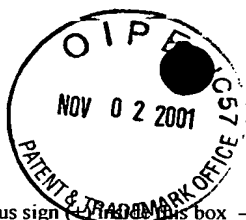
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	AR	Mining the Optical Bandwidth for a Terabit per second, Alan Wilner, IEEE Spectrum, April 1997, Pages 32-41	
	AS	Record Data-Transmission Rate Reported at ECOC '96, Laser Focus World, November 1996, pages 40-42	

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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	AT	Multiple Wavelengths Exploit Fiber Capacity, Eric Lerner, Laser Focus World, July 1997, pages 119-125	
	AU	Advances in Dense WDM push diode-laser design, Diana Zankowsky, Laser Focus World, August 1997, pages 167-171	
	AV	Multistage Amplifier Provides Gain across 80 nm, pages 22-23	
	AW	Optical Switching Promises cure for telecommunications logjam, Jeff Hecht, Laser Focus World, September 1998, pages 69-72	
	AX	The Communications Handbook, Jeffrey Gibson, 1997, pages 883-890	
	AY	WDM Local Area Networks, Kazovsky et al., IEEE LTS, May 1992, pages 8-15	
	AZ	Optical Switches Ease Bandwidth Crunch, Europhotonics, Rien Flipse, August/September 1998, pages 44-45	
	BA	Speed Demons: Is 'Faster' Better and Cheaper? Stephanie Weiss, Photonics Spectra, February 1999, pages 96-102	
	BB	Wavelength Lockers Keep Lasers in Line, Ed Miskovic, Photonics Spectra, February 1999, pages 104-110	
	BC	Optical Switches Pursue Crossconnect Markets, Hassaun Jones-Bey, Laser Focus World, May 1998, pages 153-162	
	BD	Demand Triggers Advances in Dense WDM Components, Raymond Nering, Optoelectronics World, September 1998, pages S5-S8	
	BE	Optical Networks, Hector Escobar, Photonics Spectra, December 1998, pages 163-167	

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	BF	Ultrafast Optical Switch Unveiled, Photonics Spectra, Michael Wheeler, December 1998, page 42	
	BG	Data Express, Gigabit Junction with the Next-Generation Internet, John Collins et al, IEEE Spectrum, February 1999, pages 18-25	
	BH	Designing Broadband Fiber Optic Communications Systems, Juan Lam, Communication Systems Design, February 1999	
	BI	Terabit-Transmission Demonstrations make a splash at OFC '96, Laser Focus World, April 1996, page 13	
	BJ	Multigigabit Networks: The Challenge, Claude Rolland et al., IEEE LTD, May 1992, pages 16-26	
	BK	Direct Detection Lightwave Systems: Why Pay More? Paul Green et al., IEEE LCS, November 1990, pages 36-49	
	BL	Photonics in Switching, Scott Hinton, IEEE LTD, August 1992, pages 26-35	
	BM	Advanced Technology for Fiber Optic Subscriber Systems, Hiromu Taba et al., IEEE LTS, November 1992, pages 12-18	
	BN	Fiber Amplifiers Expand Network Capacities, Eric Lerner, Laser Focus World, August 1997, pages 85-96	
	BO	Technologies for Local-Access Fiber, Yukou Mochida, IEEE Communications Magazine, February 1994, pages 64-72	
	BP	Wavelength Assignment in Multiphoton Lightwave Networks, Aura Ganz et al., IEEE Transactions on Communications, Vol. 42, No. 7, July 1994, pages 2460-2469	
	BQ	Wavelength-Division Switching Technology in Photonic Switching Systems, Suzuki et al., IEEE International Conference on Communications, ICC 1990, pages 1125-1129	

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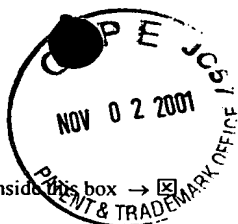
	BR	Branch-Exchange Sequences for Reconfiguration of Lightwave Networks, Labourdette et al., IEEE Transactions on Communications, Vol. 42, No. 10, October 1994, pages 2822-2832	
	BS	Use of Delegated Tuning and Forwarding in Wavelength Division Multiple Access Networks, Auerbach et al., IEEE Transactions on Communications, Vol. 43, No. 1, January 1995, pages 52-63	
	BT	Design and Cost Performance of the Multistage WDN-PON Access Network, Guido Maier et al., Journal of Lightwave Technology, Vol. 18, No. 2, February 2000, pages 125-143	
	BU	Polarization Insensitive Widely Tunable All-Optical Clock Recovery Based on AM Mode-Locking of a Fiber Ring Laser, IEEE Photonics Technology Letters, Vol. 12, No. 2, February 2000, pages 211-213	
	BV	Ultra-High-Speed PLL-Type Clock Recovery Circuit Based on All-Optical Gain Modulation in Traveling-Wave Laser Diode Amplifier, Journal of Lightwave Technology, Vol. 11, No. 12, December 1993, pages 2123-2129	
	BW	All-Optical Networks Need Optical Switches, Jeff Hecht, Laser Focus World, May 2000, pages 189-196	
	BX	Photons at Work: Optical Networks on the Rise, Lee Goldberg, Electronic Design, March 22, 1999, pages 56-66	
	BY	Asynchronous Time Division Switching, Achille Pattavina, IEEE Communication Handbook, 1997, pages 686-700	
	BZ	Multiple Access Methods for Communications Networks, Izhak Rubin, IEEE Communications Handbook, 1997, pages 622-649	

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	CA	Combining Gratings and Filters Reduces WDM Channel Spacing, Pan and Shi, OptoElectronics World, September 1998, pages S11-S17	
	CB	Picosecond-Accuracy All-Optical Bit Phase Sensing Using a Nonlinear Optical Loop Mirror, Hall et al., IEEE Photonics Technology Letters, Vol. 7, No. 8, August 1995, pages 935-937	
	CC	An Ultrafast Variable Optical Delay Technique, Hall et al., IEEE Photonics Technology Letters, Vol. 12, No. 2, February 2000, pages 208-210	
	CD	Prescaled 6.3 GHz clock recovery from 50 Gbit/s TDM Optical Signal with 50 GHz PLL using four-wave mixing in a travelling wave laser diode optical amplifier, Electronics Letters, 12 May 1994, Vol. 30, No. 10, pages 807-809	
	CE	Variable Optical delay line with diffraction limited Autoalignment, Klovekorn and Munch, Applied Optics, April 1, 1998, Vol. 37, No. 10, pages 1903-1904	
	CF	Compact 40 Gbit/s Optical Demultiplexer using a GaInAsP Optical Amplifier, Electronics Letters, November 25, 1993, Vol. 29, No. 24, pages 2115-2116	
	CG	Lucent Upgrades WaveStar to 20-Channel, 800-Gb/s Transmission; Chalmers Develops 49-dB Optical Parametric Amplifier, Photonics Spectra, June 2000, page 46	
	CH	Bit-Rate Flexible All-Optical Demultiplexing Using a Nonlinear Optical Loop Mirror, Patrick et al., Electronics Letters, April 15, 1993, Vol. 29, No. 8, pages 702-703	
	CI	All-Optical High Speed Demultiplexing with a Semiconductor Laser Amplifier in a Loop Mirror Configuration, Eiselt et al., Electronics Letters, June 24, 1993, Vol. 29, No. 13, pages 1167-1168	
	CJ	Optical Amplifiers Revolutionize Communications, Laser Focus World, September 1998, pages 28-32	

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	CK	Single Interferometer Demultiplexes 40 Gbit/s Optical-Time-Division-Multiplexed Signal, Laser Focus World, November 1999, page 11	
	CL	Fiber-Optic Chips Multiplex 16 T1/E1 Channels Over One Cable, Electronic Design, April 17, 2000, page 46	
	CM	Analysis and Dimensioning of Switchless Networks for Single-Layer Optical Architecture, Binetti et al., Journal of Lightwave Technology, Vol. 18, No. 2, February 2000, pages 144-153	
	CN	100-Gbit/s Bitwise Logic, Hall et al., MIT Lincoln Laboratory, Optics Letters, Vol. 23, No. 16, August 15, 1998, pages 1271-1273	
	CO	An Optical Technique for Bit and Packet Synchronization, Blixt and Bowers, IEEE Photonics Technology Letters, Vol. 7, No. 1, January 1995, pages 123-125	
	CP	Double-Spreading Modulation Scheme Picks up Where CDMA and TDMA Leave Off, Electronics Designs, July 10, 2000, pages 28-32	
	CQ	Transmission of a True Single Polarisation 40 Gbit/s Solution Data Signal Over 205km Using a Stabilised Erbium Fibre Ring Laser and 40 GHz Electronic Timing Recovery, Ellis et al., Electronic Letters, Vol. 29, No. 11, May 27, 1993, pages 990-992	
	CR	Time-Stretch Methods Capture Fast Waveforms, Jalali et al., Microwaves & RF, April 1999, pages 62-69	
	CS	The Fiber-Optic Subscriber Network in Japan, Wakui, IEEE Communications Magazine, February 1994, pages 56-63	
	CT	A Justification for a Variable Bandwidth Allocation Methodology for SONET Virtually Concatenated SPEs, Nevin JONES and Trevor WILSON, Lucent Technologies, July 10-14, 2000	
	CU	Higher Order SONET Virtual Concatenation, Nevin JONES, Paul LANGNER and Charles WEBB, Lucent Technologies, April 9, 1999	

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	CV	The Communications Handbook, 1997, Chapter 39, pages 542-553	
	CW	The Communications Handbook, 1997, Chapter 40, pages 554-564	
	CX	Architectural and Technological Issues for Future Optical Internet Networks, Listanti, et al., IEEE Communications Magazine, September 2000, pages 82-92	
	CY	IP Over Optical Networks: Architectural Aspects, Rajagopalan, et al., IEEE Communications Magazine, September 2000, pages 94-102	
	CZ	Labeled Optical Burst Switching for IP-over-WDM Integration, Chunming Qiao, IEEE Communications Magazine, September 2000, pages 104-114	
	DA	Approaches to Optical Internet Packet Switching, Hunter, et al., IEEE Communications Magazine, September 2000, pages 116-122	
	DB	Photonic Switches: Fast, but Functional? McCarthy, Photonics Spectra, March 2001, pages 140-150	
	DC	The Communications Handbook, Gibson, A CRC Handbook Published in Cooperation with IEEE Press, 1997 CRC Press, Inc., pages 513-528	
	DD	A Proposed Link Capacity Adjustment Scheme (LCAS) for SONET Virtually Concatenated SPEs, Jones, et al., Lucent Technologies, T1X1.5/200-199, pages 1-30	
	DE	Fiber-based components meets the needs of next-generation amplifiers, Bourgeois, WM Solutions, March 2001, 5-pages www.optoelectronics-world.com	
	DF	Spectral Equalization Keeps Optical, Ashmead, WM Solutions, January 2001, 5-pages www.optoelectronics-world.com	
	DG	Keep Your Photons in Line, Wesson et al., Photonics Spectra, September 1999, pages 102-108	
	DH	Router Promises Faster Switching, Robinson, Photonics Technology World, Photonics Spectra, August 2001, page 24	

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